

IN THE DRAWINGS

Please replace Figure 1 with the attached replacement sheet. Figure 1 is amended to be designated as Prior Art. No new matter is presented.

REMARKS

Claims 4-6 are currently pending in this application. Claim 4 is amended. Claim 7 is cancelled. Figure 1 is amended. No new matter is presented. The foregoing amendments and following remarks are considered by Applicants to overcome each rejection raised in the Office Action and to place the application in condition for allowance. Accordingly, Applicants request the reconsideration and allowance of claims 4-6.

The Examiner objected to Figure 1 and 2 for not being identified as Prior Art. Figure 1 is amended to be designated as Prior Art. No new matter is presented. With regard to Figure 2, it is submitted that Figure 2 should not be designated as prior art. Figure 2 illustrates the markings Sa and Sb on filters according to the claimed invention. However, the distinction between Figure 2 and 3 is that the filters in Figure 2 are not in the correct orientation whereas the positioning of the filters are illustrated as adjusted in Figure 3, based on the wedge angle markings. Figures 2 and 3 along with the description provided in the specification disclose correcting the orientation of the filters using the wedge angle markings. Therefore, it is respectfully submitted that Figure 2 is not prior art. Therefore, Applicants request the Examiner to excuse the error in the previous amendment describing Figure 2 as prior art. In view of the amendment to Figure 1, Applicants request the withdrawal of the objection to the drawings.

Claim 7 is objected to for containing a term lacking antecedent basis. Claim 7 is cancelled. Therefore the rejection of claim 7 is moot.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. (U.S. Patent No. 6,262,837) in view of LIS (Administrative Code of Therapeutic X-ray systems of less than one MeV) and Olympus Microscopy Resource Center – Interference Filters for Fluorescence Microscopy. The Examiner takes the position that the combination Nagano and the cited code and article teaches and/or suggests all the features recited in claims 4 and 6. Applicant respectfully disagrees.

It is respectfully submitted that the LIS reference is not a prior art. The claimed invention has a priority date of June 22, 2001. LIS (Administrative Code of Therapeutic X-ray systems of less than one MeV) has a publication date of November 29, 2004, which is after the priority date of the present invention. In addition, the Interference Filters for Fluorescence Microscopy article has a date of April 2, 2005. Therefore, it is assumed that this reference has a publication date of April 2, 2005. As a result, this reference is also not prior art in view of the priority date of the present application. Therefore, Applicants request

the withdrawal of the rejection of claim 4.

However, it is submitted that even if these references are proper prior art, the cited references fail to teach or suggest the claimed invention.

The claimed invention discloses a method for reducing the negative effects caused by image offset. In other words, when different images are overlaid, color distortions like color fringes or lack of sharpness are visible. Since filter combinations cause image offset due to the wedge angles, the claimed invention overcomes this problem by measuring and marking these small wedge angles on the filters and assigning them in the filter holder. As a result, the filters can be adjusted according to the marked wedge angles, thereby reducing the negative effects of pixel shift.

Nagano discloses a reflected light fluorescent microscope that includes a wavelength shift filter 3. An arithmetic controller controls the rotation angle of the wavelength shift filter. An angle detection section 19 detects the rotation angle of the wavelength shift filter.

Nagano discloses utilizing an inclined wavelength shift filter 3 rather than blocking filters having a determined wedge angle. The shift filter 3 of Nagano is used to determine the rotation angle whereas in the claimed invention the blocking filters are marked with the orientation of the wedge angle. Thus, Nagano does not teach the use of markings provided on the blocking filters but rather using an arithmetic controller 17 to detect the rotation angle of the wavelength shift filter.

LIS discloses that a filter system should be designed so that each filter is marked as to its material of construction and its thickness or wedge angle for wedge filters. However, LIS does not disclose an optical microscope but instead describes a therapeutic X-ray system.

Although the LIS reference discloses a filter being marked by a wedge angle for wedge filters, LIS does not teach or suggest marking blocking filters with the wedge angle. Furthermore, the small wedge angle of optical filters is not the same as the wedge filters used in X-ray systems. The wedge filters used in X-ray systems produce a special distribution of the energy of the X-ray on the object. Thus, the combination of this reference and Nagano does not teach or suggest the claimed invention.

The Olympus reference discloses that the manufacturers of the filters often place an arrow or similar marking on the filter edge to indicate the proper orientation in the light path (Page 15 Last Sentence).

The Olympus reference discloses the marking of the orientation of the filter, however the markings disclosed by Olympus is the orientation of the surface of the filter (reflective metallic like surface). Thus, the Olympus reference does not cure the deficiencies of Nagano

and LIS. Moreover, the cited articles are not proper prior art for the reasons mentioned above. Therefore, Applicants request the withdrawal of the rejection of claim 4 under 35 U.S.C. 103(a).

Claim 6 is dependent upon claim 4. Therefore, it is submitted that claim 6 recites subject matter that patentable for at least the reasons mentioned above. Thus, Applicants respectfully request the withdrawal of the rejection of claim 6 under 35 U.S.C. 103(a).

Claims 5 and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. (U.S. Patent No. 6,262,837) in view of LIS – Administrative Code for Therapeutic X-ray systems of less than 10 MeV and Olympus Microscopy Resource Center – Interference Filters for Fluorescence Microscopy and further in view of Hasegawa. Claim 7 is cancelled. Therefore the rejection of claim 7 is moot. The Examiner takes the position that the combination of the cited references teaches or suggest the features recited in claim 5. Applicants respectfully disagree.

The LIS, Olympus, and Hasegawa references fail to cure the deficiencies of Nagano. Hasegawa merely discloses providing markings on the filter that specify the name and type of filter. Thus, Hasegawa fails to teach or suggest blocking filters having wedge angle markings. As discussed above, Nagano, LIS and Olympus also fail to teach or suggest the feature of providing wedge angle markings on blocking filters. Since Hasegawa also fails to teach this feature, Applicants submit that claim 5, which is dependent upon claim 4, recites patentable subject matter.

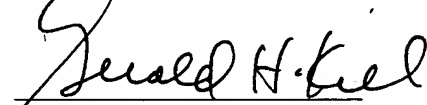
Furthermore, it is respectfully submitted that the LIS reference is not prior art as discussed above. In addition, the Olympus Microscopy article is a web article that appears to be published in 2005. As a result, this reference is also not proper prior art in view of the priority date of the present application. Therefore, Applicants request the withdrawal of the rejection of claim 5 under 35 U.S.C. 103(a).

In view of the above amendments and remarks, it is respectfully submitted that the claims now pending patentability distinguish the present invention from the cited references. Claim 4 is amended. Replacement figure 1 is provided. No new matter is presented. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance is respectfully requested.

Should the Examiner feel that a telephone conference with Applicant's attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

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Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Gerald H. Kiel". The signature is written in a cursive style with a large initial "G".

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